

ABSTRACT OF THE DISCLOSURE

An interleaver for a digital modem is provided where consecutive codeword symbols are written in parallel into first cells of registers. Reading from registers for interleaving purposes is dictated by a permutation table containing N-1 numbers which represent registers from which the current symbol should be read. Prior to data transmission, a calculation is made of lengths of the registers and a permutation table is determined. During data transmission, the first symbol in each codeword is sent directly to the output, the other symbols are sequentially written into the first cells of the corresponding registers, and the last cells of the registers are sequentially read in the order determined by the permutation table. After writing the incoming codeword into memory and reading the outgoing codeword, the contents of all memory registers are synchronously shifted by one cell in the output direction. A corresponding deinterleaver is also provided.